IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of Atty. Ref.: 620-347 COSME ET AL Group: Unassigned Serial No. 10/516,338 Unassigned Filed: November 30, 2004 Examiner: METHODS OF PURIFICATION OF CYTOCHROME P450 For: PROTEINS AND OF THEIR CRYSTALLIZING March 15, 2005 Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Sir: INFORMATION DISCLOSURE STATEMENT \boxtimes 1. PTO-1449 Pursuant to 37 CFR 1.97(b) [within 3 months of filing or prior to 1st Office Action on the merits] N/C 2.(a) Statement Pursuant to 37 CFR 1.97(c) [before Final Office Action or Allowance (requires Rule 97(e) Statement or Rule 17(p) fee)] N/C

Fee Payment Pursuant to 37 CFR 1.97(c)

Statement or Rule 17(p) fee)]

Pursuant to 37 CFR 1.97(d)

[before Final Office Action or Allowance (requires Rule 97(e)

[after Final Office Action or Allowance (requires Rule 97(e) Statement and Rule 17(p) fee), but before final fee payment]

2 .(b)

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The following are submitted in the above-identified application in compliance with 37 C.F.R. §§ 1.97 and 1.98:

∑ 4	4.	A list of documents on Form PTO-1449 together with copies of each identified document and a translation or a concise explanation of each non-English language document (such as a Search Report) is enclosed herewith.
hic na	nor	is submitted in accordance with:

This paper is submitted in accordance with:

\boxtimes	5.	37 (OFR 1.97(b): [within 3 months of filing or prior to 1st Office Action]
	6.	37 (and	CFR 1.97(c): [before Final Office Action or Allowance, whichever is earlier];
		a)	The required Statement made in item 8 below; or
		b)	The \$180.00 fee specified in 37 CFR §1.17(p) for submission of this Information Disclosure Statement is authorized in item 9 below.
	7.		CFR §1.97(d): [after Final Office Action or Allowance (requires Rule 97(e) tement and Rule 17(p) fee), but before final fee payment]; and
		a)	The fee (\$180.00) required by 37 CFR §1.17(p) is submitted herewith; and
		b)	The required Statement is stated in item 8 below.
	8.	Stat	rement under 37 CFR 1.97(e)
		a)	The undersigned attorney of record hereby certifies under 37 C.F.R. §1.97(e) that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement (each item contained in this IDS was the first citation of that item by a foreign patent office in a counterpart foreign application which occurred no more than three months prior to the filing of this IDS); or
		b)	No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement, after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in 37 CFR \$1.56(c) more than three months prior to the filing of this Information

Disclosure Statement.



9. Please charge all deficiency fees associated with the submission of this Information Disclosure Statement and any other fees applicable to this application to Deposit Account No. 14-1140. An original and one (1) copy of this document are enclosed.

Respectfully submitted, NIXON & VANDERHYE P.C.

Bv:

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Sheet 1 of 4 TTY, DOCKET NO. SERIAL NO. INFORMATION DISCLOSUR 10/516,338 **CITATION** 620-347 **APPLICANT** COSME ET AL GROUP (Use several sheets if necessary) FILING DATE Unassigned November 30, 2004 U.S. PATENT DOCUMENTS FILING DATE *EXAMINER CLASS **SUBCLASS** IF APPROPRIATE NAME INITIAL DOCUMENT NUMBER DATE 07/1998 Goldstein et al. 5,786,191 Wells et al. 11/1998 5,834,250 03/1999 Guengerich et al. 5.886.157 Goldstein et al. 5,912,120 06/1999 6,080,568 06/2000 Day et al. 6,136,553 10/2000 Christianson et al. Su et al. 12/2000 6,162,613 2003/0170842 09/2003 Williams et al **FOREIGN PATENT DOCUMENTS** TRANSLATION YES COUNTRY CLASS **SUBCLASS** NO DATE DOCUMENT WO 98/02554 01/1998 **WIPO WIPO** WO 01/11035 02/2001 **WIPO** 03/2001 WO 01/14565 **WIPO** WO 03/035693 A 05/2003 **WIPO** WO 03/040994 A 05/2003 WO 03/102192 12/2003 **WIPO** OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.) von Wachenfeldt, C.; Richardson, T.; Cosme, J. and Johnson, E.; Microsomal P450 2C3 Is Expressed as a Soluble Dimer in E. coli Following Modifications of Its N-terminus, Archives of Biochemistry and Biophysics, 1997, Vol. 339, No. 1, pp. Cosme, J. and Johnson, E.; Engineering Microsomal Cytochrome P450 2C5 to Be a Soluble Monomeric Enzyme, Journal of Biological Chemistry, 2000, Vol. 275, No. 4, pp. 2545-2553. Williams, P.; Cosme, J.; Sridhar, V.; Johnson, E. and McRee, D.; Mammalian Microsomal Cytochrome P450 Monooxygenase: Structural Adaptations for Membrane Binding and Functional Diversity, Molecular Cell, 2000, Vol. 5, pp. 121-131. Williams, P.; Cosme, J.; Sridhar, V.; Johnson, E. and McRee, D.; Microsomal cytochrome P450 2C5: comparison of microbial P450s and unique features, Journal of Inorganic Biochemistry, 2000, Vol. 81, pp183-190. T. H. Richardson, F. Jung, K. J. Griffin, M. Wester, J. L. Raucy, B. Kemper, L. M. Bornheim, C. Hassett, C. J. Omiecinski and E. F. Johnson; A Universal Approach to the Expression of Human and Rabbit Cytochrome P450s of the 2C Subfamily in Escherichia coli; Archives of Biochemistry and Biophysics, 1995, Volume 323, 87-96. JP10033166A2; Mass Expression System Of Modified Substance Of Ctochrome P450 2c19 In Escherichia Coli; Inventor: Baba Takahiko; Kirita Shiro; Aoyama Junko; Assignee: Shionogi & Co Ltd; Filed: July 23, 1996. Filed together with English abstract.

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